

Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed**1.1. Name of the Data, data collection Project, or data-producing Program:**

HMSRP Hawaiian Monk Seal Blood Values (Establishing hematology and serum chemistry reference ranges for wild Hawaiian Monk Seals)

1.2. Summary description of the data:

Hematology and serum chemistry evaluations are essential to a patient's comprehensive health exam by providing measures of organ function, blood cell volume and health status. Reference ranges have to be established to interpret that the values are within normal limits. Presently, hematology and serum chemistry results from healthy, sick and injured Hawaiian monk seals are interpreted using past studies, which were limited by small sample sizes across age classes, collected from captive Hawaiian monk seals or established using frozen samples. This study builds on previous studies in sample size, quality and demographic representation to establish blood reference ranges by using samples collected between 2004 and 2015 from wild monk seals of multiple age classes (n=65 seals; 28 adults, 18 subadults, 8 juveniles, 11 weaned pups). Samples were analyzed by a single veterinary diagnostic laboratory within 24 hours of collection from apparently healthy, free-ranging wild seals sampled opportunistically during population monitoring and research activities. Reference ranges were developed for 50 complete blood cell counts and serum chemistry parameters using the mean of the values within two standard deviations. While there are several possible approaches to establishment of reference ranges, this method was chosen to maintain consistency with those used by the veterinary diagnostic laboratory most commonly used for sample analysis. Key indices evaluated include total white blood cell count (WBC; mean- 8.145 K/uL, SD-1.73), red blood cell count (RBC; mean- 3.397 M/uL, SD- 0.46), hematocrit (mean- 51.56%, SD- 4.99), and total serum protein (TP; mean- 7.625g/dL, SD- 0.81). The development of comprehensive hematology and serum chemistry reference ranges for Hawaiian monk seals will enable more consistent and systematic interpretation of results, which will aid in the assessment and treatment of seals in rehabilitation and the determination of health status of seals sampled during translocation and other research/recovery activities.

1.3. Is this a one-time data collection, or an ongoing series of measurements?

Ongoing series of measurements

1.4. Actual or planned temporal coverage of the data:

1981-12-31 to Present

1.5. Actual or planned geographic coverage of the data:

W: 180, E: -150, N: 30, S: 10

Hawaiian Archipelago, Pacific Region

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)

Table (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: Not applicable

Platform: Not applicable

Physical Collection / Fishing Gear: Not applicable

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

Thea C Johanos

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

Pacific Islands Fisheries Science Center

2.4. E-mail address:

thea.johanos-kam@noaa.gov

2.5. Phone number:

(808)725-5709

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

Angela C Kaufman

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

Unknown

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:

Statistics used to create a blood reference range for wild, healthy monk seals

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**5.2. Quality control procedures employed (describe or provide URL of description):**

Standard data life-cycle processes are followed to ensure quality and accuracy.

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

6.1.1. If metadata are non-existent or non-compliant, please explain:**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

<https://inport.nmfs.noaa.gov/inport/item/28698>

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: <https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.pdf>

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

Yes

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

Pacific Islands Fisheries Science Center

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

<https://inport.nmfs.noaa.gov/inport/item/28698>

7.3. Data access methods or services offered:

Requestor will be asked to submit a request to Lizabeth Kashinsky (Lizabeth.Kashinsky@noaa.gov)

7.4. Approximate delay between data collection and dissemination:

1 year

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

Not applicable

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

NCEI-MD

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):

Pacific Islands Fisheries Science Center - Honolulu, HI

8.3. Approximate delay between data collection and submission to an archive facility:

1 year

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

Data are backed-up daily per PIFSC's Information Technology Services security policies.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.